PATENT SPECIFICATION

DRAWINGS ATTACHED

821,376

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COMPLETE SPECIFICATION

Carpet Tile

We, SMITH MANUFACTURING COMPANY LIMITED, a corporation organized under the laws of Ontario, of Clayson Road, Weston, Ontario, Canada, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to carpet tile, that is, to carpet formed in relatively small tile-like squares processed to be handled and used in the manner of tile.

Tile flooring is laid in patterns to produce in most cases a very attractive floor wherein the tiles may be employed in various colours to achieve the result desired. In the case of rugs or carpets the purchaser is confined to specified patterns or combinations of colours or plain colours as may be available. The present invention seeks to provide a carpet covering which may be employed either of rug dimensions or in wall to wall size produced in tile-like units of practical size, and which may be handled and laid even more conveniently than tile and by unskilled labor.

According to the invention a carpet tile of the character described comprises a base member of relatively stiff but flexible character, a carpet surface permanently secured to one side of the base member, a pressure sensitive adhesive coating on the exposed outer side of the base member, and a sheet-like covering applied over the pressure sensitive adhesive coating but peelable therefrom.

Preferably the base member is felt, processed to give it a relatively stiff but flexible character.

Preferably also the base member is reduced in thickness adjacent to and throughout its periphery to produce bevelled edges.

The invention will be clearly understood by reference to the following detailed description taken in conjunction with the accompanying drawings.

In the drawings:—

Fig. 1 is a perspective view of a carpet tile according to the present invention with the layers making up the unit separated at one corner to illustrate its general construction.

Fig. 2 is a longitudinal section taken through the carpet tile shown in Fig. 1.

Fig. 3 is a perspective view of the base for the carpet tile to illustrate the manner in which the edges are skived; and

Fig. 4 is a fragmentary perspective view to illustrate generally the manner of use of the carpet tile.

Referring to the drawings, 10 indicates a carpet tile of the present invention, which is formed as a square of comparatively small size, a convenient size being approximately eighteen inches square, although this may be increased or decreased according to requirements. The tile is made up as a laminated unit which starts with a felt base member 11, one side of which is coated or impregnated preferably with a rubber starch, namely a blend of latex and starch, the base member being then passed over a heated smoothing roll to form it with a smooth surface, which side becomes the outer exposed surface of the base member of the tile. This processing produces a backing for the carpet of relatively stiff though somewhat flexible character.

The carpet-receiving side of surface 12 of the tile unit is preferably routed or skived inwardly of and throughout its periphery as at 13 (Fig. 3). This may be done in any suitable manner. The result is that when the carpet 14 is applied thereto the carpet surface adjacent to the periphery of the tile unit thus formed slopes slightly downwardly towards the base member, or in other words a bevelled effect is produced.

The side or surface 12 of the felt base 11 is coated with adhesive, preferably water resistant adhesive such as one having natural or a synthetic rubber, as a basic component, and the carpet is firmly pressed on to the base member to provide for a permanent attachment of the two. This may be effected by passing

the carpet and base member between pressure rolls to produce a firm union, care being taken as well that the peripheral edges of the unit are subjected to sufficient pressure to cause the carpet to adhere firmly to the routed or skived portions 13 of the base member, which thus produces the slightly bevelled effect in the carpet around the periphery of the unit.

The remaining side or outer surface of the base member is provided with a coating of pressure sensitive adhesive of known character which will remain tacky, and over this adhesive a film, paper sheet or paper-like covering 15 is applied, the covering being of such character, treated if necessary, that it can be readily peeled from the base member, when it is desired to put the carpet tile into use.

The units are of such a character that it does not require a person skilled in carpet laying to lay them. The units are accurately cut in squares and therefore can be applied with care in the manner of tile. They can be used as a rug formation or as wall to wall carpeting, and moreover since they can be produced in many colours, the purchaser is able to provide for a patterned floor of various colours, as may be desired. Likewise, they can be employed in one colour.

In use it is only necessary for the purchaser to use reasonable care to ensure that the tiles are laid in straight lines so that with this factor under control the user merely peels the protective covering 15 from the outer surface of the base member, which thus exposes the tacky adhesive. The tile is merely pressed into the position which it is to assume on the floor or wall and it merely requires a repetition of this very simple operation until the covering desired made up of a number of units is produced. Likewise it can be removed from the floor or wall on which it is applied in a very simple manner, yet the pressure sensitive adhesive will maintain the tile in place under all normal conditions of usage.

Of particular importance is the skiving of the border of the upper surface of the felt base since the peripheral edges of the tile will always tend to slope downwardly slightly and consequently will avoid any possibility of a shoe catching the edge of a tile and inadvertently lifting it from its set position. Moreover, this has the result of giving a demarcation effect between the tiles which creates a pleasing appearance. While the outer surface of the carpet tile base member could be skived throughout its periphery, as an alternative to skiving the inner surface as above described, the latter mentioned practice is preferable and of substantial importance for the reason that the tile then will always have a natural, flat, outer base surface which will lie flat and avoid any tendency of the edges to lift which might be the case in the alternative proposal due to the necessity of firmly pressing the peripheral edges of the tile against the floor or other surface employed and the possible pull of the carpet on the peripheral edges of the base member which are thus bent slightly downwardly in the case of the base member skived on its outer surface when said edges are pressed against the floor or other surface to which the tile is applied.

WHAT WE CLAIM IS:—

1. Carpet tile of the character described comprising a base member of relatively stiff but flexible character, a carpet surface permanently secured to one side of the base member, a pressure sensitive adhesive coating on the exposed outer side of the base member, and a sheet-like covering applied over the pressure sensitive adhesive coating but peelable therefrom.

2. Carpet tile as claimed in claim 1 in which the base member is felt, processed to give it a relatively stiff but flexible character.

3. Carpet tile as claimed in claims 1 or 2 in which the base member is reduced in thickness adjacent to and throughout its periphery to produce bevelled edges.

4. Carpet tile as claimed in claim 3 in which the reduction in thickness of the base member is achieved from the inside surface thereof before the carpet surface is applied to that surface of the base member.

5. Carpet tile as claimed in any of the preceding claims in which the outer surface of the base member is processed to provide a smooth surface prior to receiving the adhesive coating.

6. Carpet tile as claimed in any of the preceding claims in which the sheet-like covering is paper.

7. Carpet tile as claimed in claims 1 to 5, or 6 in which the inner carpet-receiving surface of the base member is skived around and inwardly of its periphery and throughout the extent of the latter to reduce the base member in thickness around its periphery.

8. Carpet tile of the character described substantially as hereinbefore described with reference to the accompanying drawings.

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1 SHEET This drawing is a reproduction of the Original on a reduced scale.

Fig. 1.

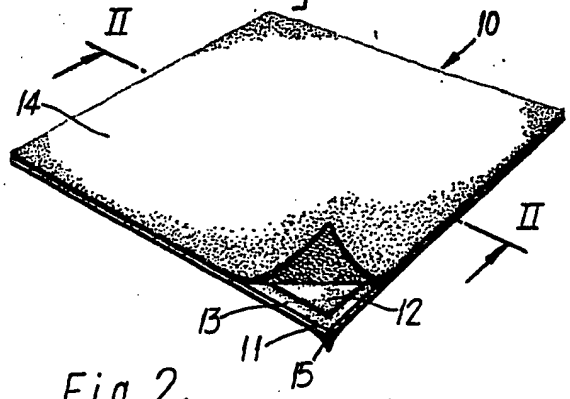


Fig. 2.

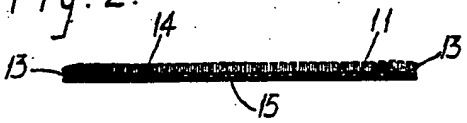
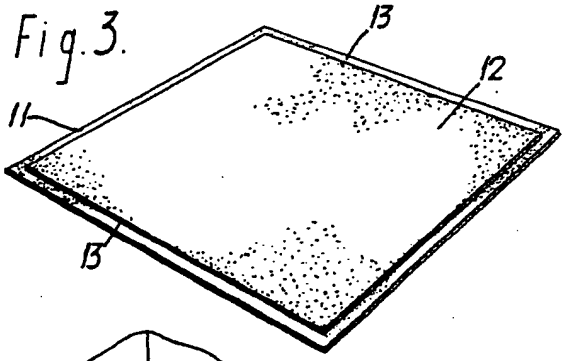


Fig. 3.



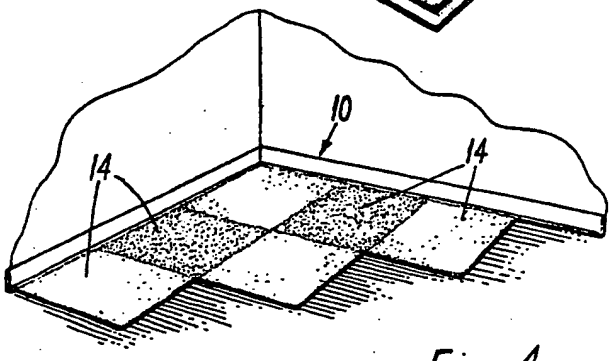


Fig. 4.